

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| PPLICATION NO.                           | FILING DATE      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|------------------------------------------|------------------|----------------------|---------------------|-----------------|
| 10/662,134                               | 09/12/2003       | Ronald J. Hammond    | 0028019.00201       | 9078            |
| 21878                                    | 7590 06/01/2005  |                      | EXAM                | INER            |
| KENNEDY COVINGTON LOBDELL & HICKMAN, LLP |                  |                      | KOCH, GEORGE R      |                 |
| 214 N. TRY                               | ON STREET        |                      |                     |                 |
| HEARST TO                                | OWER, 47TH FLOOR |                      | ART UNIT            | PAPER NUMBER    |
|                                          | TE, NĆ 28202     |                      | 1734                |                 |

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Application No.                                                                                                                                                                                           | Applicant(s)                                                                                                                                   | -  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 10/662,134                                                                                                                                                                                                | HAMMOND, RONALD J.                                                                                                                             |    |
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Examiner                                                                                                                                                                                                  | Art Unit                                                                                                                                       |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | George R. Koch III                                                                                                                                                                                        | 1734                                                                                                                                           |    |
| The MAILING DATE of this communication Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ion appears on the cover sheet w                                                                                                                                                                          | ith the correspondence address                                                                                                                 |    |
| A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICAT  - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communication of the period for reply specified above is less than thirty (30) day of the first of the period for reply is specified above, the maximum statutory and the period for reply within the set or extended period for reply will, the period patent term adjustment. See 37 CFR 1.704(b). | TION.  CFR 1.136(a). In no event, however, may a ration.  ys, a reply within the statutory minimum of thir y period will apply and will expire SIX (6) MON by statute, cause the application to become Al | reply be timely filed  ty (30) days will be considered timely.  ITHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133). |    |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                           |                                                                                                                                                |    |
| <ul> <li>1) Responsive to communication(s) filed or</li> <li>2a) This action is FINAL.</li> <li>3) Since this application is in condition for a closed in accordance with the practice up</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                       | This action is non-final. allowance except for formal mate                                                                                                                                                | •                                                                                                                                              |    |
| Disposition of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                           |                                                                                                                                                |    |
| 4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <u>8 and 29</u> is/are withdrawn from o                                                                                                                                                                   | onsideration.                                                                                                                                  |    |
| Application Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                           |                                                                                                                                                |    |
| 9) The specification is objected to by the Ex 10) The drawing(s) filed on is/are: a) Applicant may not request that any objection Replacement drawing sheet(s) including the 11) The oath or declaration is objected to by                                                                                                                                                                                                                                                                                                                                                                                 | accepted or b) objected to to the drawing(s) be held in abeyar correction is required if the drawing                                                                                                      | nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).                                                                              |    |
| Priority under 35 U.S.C. § 119                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | •                                                                                                                                                                                                         |                                                                                                                                                |    |
| 12) Acknowledgment is made of a claim for f a) All b) Some * c) None of:  1. Certified copies of the priority doc 2. Certified copies of the priority doc 3. Copies of the certified copies of th application from the International I * See the attached detailed Office action for                                                                                                                                                                                                                                                                                                                       | uments have been received.<br>uments have been received in A<br>ne priority documents have been<br>Bureau (PCT Rule 17.2(a)).                                                                             | pplication No<br>received in this National Stage                                                                                               |    |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-9  3) Information Disclosure Statement(s) (PTO-1449 or PTO/Paper No(s)/Mail Date 3/4/2005.                                                                                                                                                                                                                                                                                                                                                                                                  | 148) Paper No(s                                                                                                                                                                                           | Summary (PTO-413)<br>s)/Mail Date<br>nformal Patent Application (PTO-152)                                                                      |    |
| J.S. Patent and Trademark Office                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ffice Action Summary                                                                                                                                                                                      | Part of Paper No./Mail Date 20050529                                                                                                           | G. |



Application/Control Number: 10/662,134 Page 2

Art Unit: 1734

#### **DETAILED ACTION**

1. An action on claims 1-9, 12, 14-25, 27, 30-43 follows.

## Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 3. Claims 1-9, 12, and 14-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification provides no support for the positioning of the first singular cartons *en masse*.
- 4. Claims 20-25, 27, and 29-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification provides no support for the positioning a layer of the first singular cartons from the supply of first singular cartons *en masse*.
- 5. Claims 37-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification provides no support for the positioning a plurality of first singular cartons *en masse*.

### Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 8. Claims 1-3, 5-9, 12, 14, 20-25, 27 and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson (US 4,365,710), the admitted prior (paragraphs 0002 to 0004) and David (US 5,895,540).

Swanson discloses a method of simultaneously making on a common assembly surface a plurality of composite cartons each comprised of a first singular carton layer adhered to a second carton layer, comprising the steps of positioning a plurality of first

singular cartons (lowest array in Figure 1) in a predetermined array on the assembly surface (pallet 13), positioning adhesive at one or more predetermined adhesive locations on each first singular carton in the array of first cartons on the assembly surface (via the apparatus of Figure 5, see column 3), and positioning a plurality of second singular cartons en masse in a predetermined array adjacent to the array of singular cartons on the assembly surface.

Swanson does not disclose that the composite cartons are created such that they comprise a first singular carton adhered to a second singular carton, or positioning the second carton layer over the first carton layer to create these composite carton since the layers correspond, or that each first singular carton remains joined to a corresponding second singular carton when the corresponding second singular carton is lifted from the assembly surface.

The admitted prior art discloses that it is known for composite cartons which comprise a first singular carton adhered to a second singular carton to be created. Furthermore, Daivd discloses that it is known to stack in such arrays on a pallet (see Figure 3, which shows cartons 34 matched up on pallet 56) such that each first singular carton is adhesively secured to at least one corresponding second singular carton. David discloses that this method allows for the cartons to be unitized, and eliminates the need for plastic wrapping. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such a stacking pattern as in David in order to create the product of the admitted prior art in order to eliminate plastic wrapping and ensure unitizing of the cartions.

Application/Control Number: 10/662,134

Art Unit: 1734

Similarly, as to claim 20, see the rejection of claim 1 above for all of the limitations. Furthermore, Swanson (see item 13, and claim 2) and David (Figure 3, item 56) also both disclose that the first layer is positioned on a pallet.

Similarly, as to claim 37, Swanson and David discloses more than 2 layers of arrays. Swanson discloses repeating the positioning process for three predetermined arrays, and David discloses repeating the positioning process for up to 3 arrays.

As to claim 2, 21, and 38, David as incorporated into Swanson and the admitted prior art results in the additional plurality of layers as claimed. Specifically, David discloses several "additional layers" in the stack (see Figure 8).

As to claim 3, 22 and 39, David as incorporated into Swanson and the admitted prior art results in the additional plurality of layers being created a plurality of times.

As to claim 4, David as incorpoated into Swanson discloses that the tape is in between the items.

As to claim 5 and 23, the resultant composite carton product of the process of Swanson, the admitted prior art and David is separable without substantially degrading the structural integrity of the singular cartons (and see Swanson, column 2, lines 37-45, which discloses that the cartons are meant to be torn away from each other)

As to claim 6 and 24, Swanson discloses that the cartons are meant to be torn away from each other (see column 2, lines 37-45). However, Swanson, the admitted prior art, and David do not suggest a specific separating force of about 20 to 22 pounds. However, official notice is taken that it is well known and conventional to optimize the

prior art separation force range. One in the art would desire a range that provides both sufficient attaching force, without being difficult for a customer to separate. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have optimized the separation force to about 20 to 22 pounds in order to achieve sufficient joining strength with being difficult for a customer to separate.

As to claim 7, both Swanson and Davids disclose that the quantity of first singular cartons equals the quantity of second singular cartons, since both use identical cartons in each identically sized layer.

As to claim 8, David as incorporated with Swanson and the admitted prior art discloses that the second layer of the array is substantially identical to the second layer of the array.

As to claim 9, Swanson discloses that the assembly surface is a pallet (item 13)

As to claim 12 and 25, Swanson (see column 2, lines 46-55) discloses that each carton/package contain products before being positioned on the assembly surface.

As to claim 14, Swanson (see column 2) and David (see Figures) discloses that the products in each carton are identical.

As to claim 27, the admitted prior art discloses that the products can be beverage containers (see paragraphs 0002 to 0004).

9. Claims 4 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson, the admitted prior art, and David as applied to claim 1 above, and further in view of Fujiwara (US Patent 5,722,584)

Application/Control Number: 10/662,134

Art Unit: 1734

Swanson, the admitted prior art, and David do not disclose the additional step of positioning an object on each first singular carton prior to positioning of the second singular carton as in claim 4 or cuts on the surface of the carton as in claim 19.

However, Fujiwara discloses that it is known to include cut marks and objects on each carton for further use (such as partition flap 8). Fujiwara discloses that these partition flaps are useful on the customer site for use as displays (see column 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such an object in order to achieve further utility of the cartons.

10. Claims 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson, the admitted prior art, and David as applied to claim 1 above, and further in view of Winski (US 5,269,645)

Swanson, the admitted prior art and David do not disclose that the positioning is performed by a robot, that the robot is approximately equidistant from the first carton layer, second layer and pallet, that the pallet is lowered after each layer is stacked, or that the stack supply layers of first cartons and second cartons are raised with each operation.

Winski discloses a robot for stacking packages on a pallet (see Figure 13, item 226). Winski also discloses that the robot is approximately equidistant for all elements, and that elevator elements can be used to manipulate the levels of the individual elements (see Figure 13) analogous to the carton stacks. While Winski does not disclose lowering the pallet stack, one in the art would appreciate that the levels are

Application/Control Number: 10/662,134 Page 8

Art Unit: 1734

relative, and disclosure of raising the supply stack would render obvious lowering of the pallet stack. One in the art would appreciate that these operations simplify the handling of the articles, and would improve production efficiency. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize such robot with stack and pallet elevator capabilities in order to simplify the handling of the articles and improve production efficiency.

### Allowable Subject Matter

- 11. Claims 15 (and dependent claims 16-18) and 34 (and dependent claims 35-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 12. Claims 40-43 are allowed.

#### Response to Arguments

- 13. Applicant's arguments with respect to 1-9, 12, 14, 19-25, 27, 30-33, and 39 have been considered but are most in view of the new ground(s) of rejection.
- 14. In response to applicant's arguments as to Villemure being unrelated, these arguments are persuasive and David has been applied instead.

Application/Control Number: 10/662,134

Art Unit: 1734

15. In response to applicant's argument that Swanson uses the adhesive to provide stability instead of bonding the first and second cartons together (first point, pages 14 and 15 of the response filed 2/28/2005), the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Additionally, the bond pattern of David would result in cartons or packages being bonded together as claimed.

Page 9

- 16. In response applicant's arguments that Swanson (and presumably David) do not place the cartons or packages en masse, Swanson and David appear to place the cartons en masse. If applicant intends for en masse to imply that all cartons are placed simultaneously, i.e., that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., placing the cartons simultaneously) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- 17. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "that there is no adhesive on top of cartons in every second layer in the pallet stack" as recited in the third point of the arguments on page 15) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification,

limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

18. In response to applicant's arguments with regard to Winski, it is noted that Winski is merely recited for the robotic stacking capabilities, and not for sheet applications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Koch III whose telephone number is (571) 272-1230 (TDD only). If the applicant cannot make a direct TDD-to-TDD call, the applicant can communicate by calling the Federal Relay Service at 1-866-377-8642 and giving the operator the above TDD number. The examiner can normally be reached on M-Th 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> George R. Koch III Patent Examiner Art Unit 1734

GRK 5/29/2005